

## UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.
09/281,089	03/30/99	KUHN		Н	1996A
025280		IM22/0108	٦	EXAMINER	
MILLIKEN & COMPANY		1742270100		GUARR	IELLO, J
920 MILLIKEN RD				ART UNIT	PAPER NUMBER
PO BOX 1926 SPARTANBURG				1771	2
				DATE MAILED	:
					01/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Office Action Summary	Application No.  Applicant(s)  OP 281089  KUN M Et Q /  Examiner Group Art Unit
	38/14 Greawiello 1771
—The MAILING DATE of this communication appea	rs on the cover sheet beneath the correspondence address
Priod fr Reply	3
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET 1 OF THIS COMMUNICATION.	O EXPIREMONTH(S) FROM THE MAILING DATE
from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than thirty (30) days, a result of the period for reply specified above is less than the period for reply specified above is less	eply within the statutory minimum of thirty (30) days will be considered timely.  expire SIX (6) MONTHS from the mailing date of this communication atte, cause the application to become ABANDONED (35 U.S.C. § 133).
Status	
☐ Responsive to communication(s) filed on	
☐ This action is <b>FINAL</b> .	
<ul> <li>Since this application is in condition for allowance excep accordance with the practice under Ex parte Quayle, 193</li> </ul>	for formal matters, <b>prosecution as to the merits is closed</b> in 5 C.D. 1 1; 453 O.G. 213.
Disp sition of Claims	<u>₩</u>
Claim(s)	is/are pending in the application.
Of the above claim(s)	
	is/are allowed.
	is/are rejected.
	is/are objected to.
in the second se	are subject to restriction or election
Application Papers	requirement.
☐ See the attached Notice of Draftsperson's Patent Drawir	g Review, PTO-948.
☐ The proposed drawing correction, filed on	is · □ approved □ disapproved.
☐ The drawing(s) filed onis/are object	ted to by the Examiner.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Pri rity under 35 U.S.C. § 119 (a)-(d)	k <sub>na</sub>
<ul> <li>□ Acknowledgment is made of a claim for foreign priority u</li> <li>□ All □ Some* □ None of the CERTIFIED copies of</li> <li>□ received.</li> </ul>	the priority documents have been
<ul> <li>□ received in Application No. (Series Code/Serial Numb</li> <li>□ received in this national stage application from the Interest</li> </ul>	· ·
*Certified copies not received:	•
Attachment(s)	
☐ Information Disclosure Statement(s), PTO-1449, Paper N	o(s) Interview Summary, PTO-413
☑ Notice of Reference(s) Cited, PTO-892	☐ Notice of Informal Patent Application, PTO-152
□ Notice of Draftsperson's Patent Drawing Review, PTO-94	8
Offic	e Action Summary

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

Application/Control Number: 09/281089

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 1, it is not clear what the terms "coprecipitate" and "copolymer" encompass, since iron oxide hydroxide and aluminum oxide hydroxide are inorganic species **not** polymeric species.

In claim 2, line 1, is is not clear what the phrase "substantially goethite" encompasses since the specification states on page 13, line 1, "coating comprises goethite, lepidocrocite, hematite, magnetite or a combination of

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these forms". It appears that the coating of "goethite" is not substantially "goethite".

17. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

18. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "copolymer" is usually referred to polymeric species, not inorganic ionic species. The specification on page 11, line 5; page 12, line 8; page 12, line 21(copolymerized) refers to "copolymer" or "copolymerized" with regard to the interaction of the ionic species. These terms refer to polymeric species not inorganic ionic species. This violates the

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written description requirement since these terms are used out of usual context with regard to chemical interaction.

## Claim Rejections - 35 USC § 103

- 19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishino et al. 4,911,957 in view of Watanabe et al. 4,435,220.

Ishino describes composite ferrite textiles and how a film can be deposited on a fibrous substrate (like a textile) within certain ranges of pH, and concentration of ions (column 1, lines 15-20; column 2, lines 1-14; lines 58-68).

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Ishino describes how other ions can be added, like aluminum in a water soluble salt forming a mixed species, (column 3, lines 1-10). Ishino differs from the claimed invention because the specific aluminum salts are not stated.

Watanabe describes transparent colored pigments of metal oxide or metal hydroxide, which are used for changing the color of pigments, (column 3, lines 10-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify ferrite textile of Ishino with the aluminum hydroxide salts of Watanabe motivated with the expectation that the coating produced on the textile would give enhanced properties of color reflectivity. It would be within the skill of the artisan to optimize the amounts of the components as Watanabe indicates, so as to achieve color shade by mixing proportions of the metal oxides, (column 3, lines 35-39).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone

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number is (703) 308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

John J. Guarriello:gj

Patent Examiner

December 12, 2000

December 19, 2000

December 27, 2000

BLAINE COPENHEAVER